ATLANTIC INTRACOASTAL WATERWAY BRIDGES, N.C.

COMMUNICATION

FROM

THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, SUBMITTING A SPECIAL REPORT ON THE ATLANTIC INTRACOASTAL WATERWAY BRIDGES, NORTH CAROLINA, REQUESTING MODIFICATION OF THE PROJECT FOR REPLACEMENT OF FIVE BRIDGES AUTHORIZED BY SECTION 101 OF THE RIVER AND HARBOR ACT OF 1970 (PUBLIC LAW 91-611)



AUGUST 31, 1976. – Referred to the Committee on Public Works and Transportation, and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE WASHINGTON: 1976

ATLANTIC ENTRACOASTAL WATERWAY BRIDGES, N.C.

NOTABLIGHMOD

30.094

THE ASSISTANT SECRETARY OF THE ARMY.

DWITTIMENART

A LLTTER EROM THE CHIEF OF BYOLDELIS DEFARTS
MENS OF THE CREMY SUBMITTINGS PRODE REPORT
ON THE CALLANTS INTRACOASTAL WASERWAY
EMDCES, NOTHER CAROLINA, RITOLIFSTING MODIFIC
CATION OF THE PROJECT OF SERVING SERVER
BRIDGES ACTHORIZED AND SERVER
AND MARROE ACT OF UPTORIZED ATTERNATION
AND MARROE ACT OF UPTORIZED ATTERNATION

ADGUST 31, 1976 — Referred to the Pargainse on Public Works

2 *** and Fransportsneh, and creered/todestripted

h na et ministrar autage autour es angulares et un transfer a

CONTENTS

	Page
Letter of transmittal	v
Comments of the Office of Management and Budget	vii
Report of the Chief of Engineers, Department of the Army	1

CONTENTS

Atter of transmittel

Comments of the Office of Management and Rudget

teport of the Chief of Engineers, Department of the Army



DEPARTMENT OF THE ARMY OFFICE OF THE ASSISTANT SECRETARY

WASHINGTON, D.C. 20310

August 25, 1976

Honorable Carl Albert Speaker of the House of Representatives Washington, D. C. 20515

Dear Mr. Speaker:

I am transmitting herewith a special report on the Atlantic Intracoastal Waterway Bridges, North Carolina. The purpose of the report is to request Congressional modification of the project for replacement of five bridges over the Atlantic Intracoastal Waterway, authorized by Section 101 of the River and Harbor Act of 1970 (Public Law 91-611).

During the preparation of detailed advanced engineering and design studies, the State of North Carolina advised that they would be unable to participate in the 25 percent cost sharing of the first costs for replacement of the bridges, as authorized. This modification in the local cooperation requirements is beyond the discretionary authority of the Department of the Army, therefore specific Congressional action is required.

Withdrawal of the State offer to contribute construction funds in no way minimizes the critical need for bridge replacement. The structures are both inadequate in design and hazardous in fact. Because of the possibility of failure, and since the bridges are Federally constructed, owned, and operated, the five bridges should be replaced as expeditiously as possible.

The Office of Management and Budget advises that there is no objection to the submission of the proposed report to the Congress. However, it states that no commitment can be made at this time as to when any additional construction appropriation would be submitted for construction of the project if the modification is authorized by the

Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation. A copy of the letter from the Office of Management and Budget is inclosed as part of the report.

Sincerely,

1 Incl As stated Victor V. Veysey
Assistant Secretary of the Army
(Civil Works)

sted ed. The Statu of North Carolina advised that respond to Winnerle to gardicter to the 20 percent approximation of the Carolina Status of the Carolina Status of the Carolina Status of the Office of the Carolina Status of the Office of the Carolina Status of the Carolina S



OFFICE OF MANAGEMENT AND BUDGET

WASHINGTON, D.C. 20503.

25 June 1976

Honorable Martin R. Hoffman Secretary of the Army Washington, D.C. 20310

Dear Mr. Secretary:

You recently submitted a report of the Chief of Engineers on Atlantic Intracoastal Waterway Bridges, North Carolina for advice as to its relationship to the program of the President, pursuant to Executive Order No. 9384, dated October 4, 1943.

There would be no objection to the submission of this report to the Congress. No commitment, however, can be made at this time as to when any estimate of appropriations would be submitted for construction of the project, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then-prevailing fiscal situation.

Sincerely yours

Mames L. Nitchell Associate Director COMMENTS OF THE OFFICE OF MANAGEMENT AND HUBSET

CERCE OF MANAGEMENT AND BUCKET

COFFICE OF MANAGEMENT AND BUCKET

COFFICE OF MANAGEMENT AND BUCKET

COMMENTED BY HOFFMAN

COMMENTED BY HOFFMAN

COMMENTED BY HOFFMAN

COMMENTED BY HOFFMAN

Not recently submitted a report of the Chief of Engineers

As recently submitted a report of the Chief of Engineers

As recently submitted a report of the Chief of Engineers

As recently submitted a report of the Chief of Engineers

As recently submitted a report of the Submitted of Engineers

As that a first of the Specutive order by 9881, dated

October A. 1963.

There would be no obsection to the submission of this

report to the Congress. No dommitment, however, dan

Frey the Congress. No dommitment, however, dan

There would be no objection to the submission of this report to the Coloress. It commitment, however, can be made at this time as to when any estimate of appropriations would be submitted for construction of the project, it authorized by the Congress, since this would be governed by the President's budgetary objectives as not entired the they were all of they are they were all of the they were all of they are all of they are they are they are all of they are all of they are they are all of they are all of

earth Areaeure

Associato Direcent

ATLANTIC INTRACOASTAL WATERWAY BRIDGES, NORTH CAROLINA

REPORT OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY



DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS WASHINGTON, D.C. 20314

1 October 1975

SUBJECT: Atlantic Intracoastal Waterway Bridges, North Carolina

THE SECRETARY OF THE ARMY

- 1. I submit for transmission to Congress my special report on the previously authorized project for the replacement of five Federal highway bridges over the Intracoastal Waterway in North Carolina. The purpose of this report is to support a request for specific Congressional action to modify the project authorization.
- 2. The sole responsibility for construction, operation, and maintenance of the existing bridges lies with the Federal Government. However, in the interest of expediting the replacement of the substandard swing bridges with high-level fixed span bridges, the North Carolina State Highway Commission offered to pay 25 percent of the first cost of replacement and to accept ownership and maintenance responsibilities. The District and Division Engineers recommended authorization with the acceptance of the unsolicited offer of cooperative participation by the State of North Carolina. Congress authorized replacement of the bridges in accordance with these recommendations. During the preparation of detailed advanced engineering and design studies on the Wilkerson Creek Bridge, the State of North Carolina advised the District Engineer (Exhibit 1), that the State would be unable to participate in the 25 percent cost sharing of the replacement of Wilkerson Creek Bridge, as presented in the authorizing document. In a subsequent resolution (Exhibit 2), the State of North Carolina indicated that they would also be unable to participate in the first costs of the remaining four bridges. maintains its agreement to accept ownership and maintenance responsibilities for the replaced bridges after completion of construction as presented in the authorizing document.
- 3. Withdrawal of the State of North Carolina's offer to contribute construction funds to expedite the replacement of the five Federal bridges in no way minimizes the critical need for bridge replacement. The structures are both inadequate in design and hazardous in fact, and their continued use is essential to the quality of life in eastern North Carolina. Because of the possibility of failure, and since the bridges are Federally constructed, owned and operated, it is considered that the five bridges should be replaced at Federal expense as expeditiously as possible. Information presented in the following paragraphs has led me to this position.

4. EXISTING CONDITIONS.

- a. All five bridges were provided at Federal expense to reconnect roads or highways that were severed by the construction of the Atlantic Intracoastal Waterway.
- b. Construction of the existing bridges was authorized by the River and Harbor Acts of 1912 and 1933. Four were constructed during the period 1930 to 1935, the fifth was constructed in 1940. All were constructed and have been operated and maintained with Federal funds appropriated for the Atlantic Intracoastal Waterway navigation project.
- c. Four of the structures are steel, swing-span bridges with vertical roadway clearances of 13-1/2 feet and clear roadway widths of 18-20 feet. The fifth structure is a steel, twin swing-span bridge with an unlimited vertical roadway clearance, and a clear roadway width of 24 feet. As a safety precaution, the posted safe-load capacity of four bridges has been reduced below the design loading.
- d. Current design standards applicable to the bridges provide for a clear roadway width of 36 to 40 feet, a minimum overhead clearance of 14 feet, and a greater design loading.
- e. In compliance with the National Bridge Inspection Standards of the Federal Highway Administration, the five bridges were found to be overstressed when applying the current user loading and considering the present deteriorated state of the structure and loss of section. Overstress on the bridges ranges up to a maximum 80 percent on the Hobucken Bridge. Posting of maximum load limitations have been ineffective in reducing the bridge loadings. Trucks exceeding the posted load limits frequently cross these bridges.
- f. The five existing structures are grossly inadequate from the stand-point of clear roadway widths and design loading, and four have restricted vertical clearances. These substandard features together with the poor physical condition of the bridges, present potential and growing traffic hazards. These conditions, together with the increasing cost of operation and maintenance, indicate an urgent need for the immediate replacement of four of the bridges and the subsequent replacement of the Coinjock Bridge.
- 5. <u>AUTHORITY</u>. The replacement of the five bridges was authorized by Section 101 of the River and Harbor Act of 1970 (Public Law 91-611). The authorization was contingent upon certain requirements of local cooperation. These requirements are:

"Provided that the State of North Carolina contribute 25 percent of the actual first cost of the replacement bridges either in a lump sum prior to construction or in installments prior to the start of pertinent work items in accordance with construction schedules as required by the Chief of Engineers, the final apportionment of costs to be made after the actual costs have been determined; and that, upon completion of each bridge, the State accept maintenance, replacement, and ownership responsibilities thereof; the bridges to remain toll free. The Board further recommends that ownership of each replacement bridge be transferred to the State of North Carolina upon completion."

6. AUTHORIZED PLAN.

- a. The authorized plan provides for replacement of the five existing swing bridges over the Atlantic Intracoastal Waterway in North Carolina, at Wilkerson Creek, Hobucken, Core Creek, Fairfield and Coinjock, with two-lane fixed bridges having a 65-foot vertical clearance over the waterway.
- b. On the basis of current physical condition, bridge widths, and average daily traffic, a replacement program was authorized with priority scheduling immediate replacement of the Wilkerson Creek Bridge and the subsequent replacement of the Hobucken, Core Creek, Fairfield and Coinjock Bridges in that order. In view of long-range projections of increased traffic on the Coinjock Bridge and an estimated time lag of several years before preconstruction planning will begin, the criteria of adequate design width for this bridge must be reexamined during preconstruction planning.

7. POST-AUTHORIZATION STUDIES.

- a. Detailed engineering and design studies, pertinent to the roadway or bridge replacements, are being prepared on contract by the North Carolina Department of Transportation and Highway Safety.
- b. Advance engineering and design is essentially complete for the replacement of the Wilkerson Creek and well advanced for replacement of Hobucken Bridge. A fully coordinated Environmental Impact Statement for the replacement of the Wilkerson Creek Bridge has been prepared.
- c. Phase I project reformulation studies indicate no significant changes from project formulation as visualized in the preauthorization studies except for the proposed change in the local cooperation requirements.

8. RECOMMENDED PIAN OF DEVELOPMENT. The authorized plan of development should be modified as a result of the decision by the State of North Carolina not to cost share in the replacement of the bridges. On this basis, the recommended plan provides that all first costs of the bridge replacements shall be borne by the United States, provided that, upon the completion of each bridge, the State accept maintenance, replacement, and ownership thereof, and the bridges remain toll free.

9. PROJECT COSTS.

a. The following tabulation presents a comparison of the costs of the authorized project at the time of authorization with those of the recommended project;

	Authorized Project (1969 Base)	Recommended Project (October 1975 Base)
Wilkerson Creek	kurastual tuututus kalkutotoi. Mattuut – Taatuutus Trahatti aid	
Federal Non-Federal Total	\$2,145,000 715,000 \$2,860,000	\$5,855,000 0 \$5,855,000
Hobucken		
Federal Non-Federal Total	\$2,220,000 <u>740,000</u> \$2,960,000	\$6,496,000 0 \$6,496,000
Core Creek		
Federal Non-Federal Total	\$2,235,000 745,000 \$2,980,000	\$5,341,000 0 \$5,341,000
Fairfield		
Federal Non-Federal Total	\$2,183,000 727,000 \$2,910,000	\$5,264,000 0 \$5,264,000
Coinjock		
Federal Non-Federal Total	\$2,437,000 <u>813,000</u> \$3,250,000	\$5,644,000 \$5,644,000

Total All Bridges

Federal	\$11,220,000	\$28,600,000
Non-Federal	3,740,000	0
Total	\$14,960,000	\$28,600,000

- b. A benefit analysis and B/C ratios are not applicable since a cost effective analysis was made in lieu of benefit-cost analysis. The recommended plan remains the most cost effective plan regardless of the cost sharing provisions.
- 10. CONCLUSION. The offer by the State of North Carolina to cost-share in the replacement of the bridges was made in the interest of expediting their replacement. Withdrawal of State support does not minimize the critical need for bridge replacements. The chance for disaster is ever present, and since the bridges are Federally built, owned, and operated, the responsibility for any failure will rest upon the Federal government. The recommended plan provides the best solution for expediting the replacement of the bridges, and eliminating the hazardous traffic situation.
- 11. RECOMMENDATIONS. I recommend the immediate modification of the provisions of local cooperation required by Section 101 of the River and Harbor Act of 1970 (PL 91-611) to relieve the State of North Carolina from the obligation of contributing 25 percent of the cost of replacing the bridges.

2 Incl

1. Exhibit 1

Lieutenant General, USA 2. Exhibit 2 Chief of Engineers

cutlook for funds and on the funding requirements of the



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND HIGHWAY SAFETY RALEIGH 27611

JAMES E. HOLSHOUSER, JA. GOVERNOR

March 13, 1974

DIVISION OF HIGHY

BRUCE A. LENTZ
SECRETARY Colonel Albert C. Costanzo
District Engineer
U. S. Corps of Engineers
Wilmington, North Carolina 28401

Attention Mr. Long

Dear Colonel Costanzo:

Subject: Proposed Construction Agreement for Wilkerson Creek Bridge on US 264 over AIWW -Hyde County, N. C.

On February 5, 1974, your representative gave us a draft of the subject agreement for review and comment.

One of the provisions included in this draft agreement requires a commitment for the State to participate in the bridge replacement project to the extent of 25 percent of its cost.

The Planning and Programming Committee of our Board of Transportation has concluded it cannot recommend the Board agree to participate in the cost of the bridge replacement project. The Committee's decision was based on the current outlook for funds and on the funding requirements of the Seven Year Highway Improvement Program adopted by the Board on October 12, 1973.

Please advise this office if you plan to proceed with the bridge replacement project without State participation. If so, we will proceed with further review and comment on the ' draft construction agreement.

With best regards, I am.

BIIly Rose

State Highway Administrator

Ethibit 1 17/11



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND HIGHWAY SAFETY RALEIGH 27611

February 7, 1975

JAMES E. HOLSHOUSER, JR. GOVERNOR

TROY A. DOBY

DIVISION OF HIGHWA

Colonel Homer Johnstone
District Engineer
Wilmington District, Corps of Engineers
Department of the Army
P. O. Box 1890
Wilmington, North Carolina 28401

Attention: Mr. E. C. Long, Jr.

Dear Colonel Johnstone:

Re: U.S. Army Corps of Engineers' Bridges Over the Intracoastal Waterway, Wilmington District

This is in response to the 31 December 1974 telephone request made by Mr. E. G. Long of your office. The N. C. Board of Transportation formally adopted by resolution on 7 February 1975 a commitment to accept ownership and responsibility of new high level fixed-span bridges from the U.S. Army Corps of Engineers upon completion of said construction at the following locations on the Intracoastal Waterway:

(a) Hobucken on NC 33 in Pamlico County

(b) Core Creek on NC 101 in Carteret County

(c) Fairfield on NC 94 in Hyde County

(d) Coinjock on US 158 in Currituck County

A certified copy of this resolution is enclosed.

Sincerely,

Billy Rose

State Highway Administrator

BR/aj Enclosure cc: Mr. Troy A. Doby

Exhibit 2.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND HIGHWAY SAFETY BOARD OF TRANSPORTATION MEETING FEBRUARY 7, 1975

Chairman Doby called the meeting of the Board of Transportation to order at 9:30 a.m., Friday, February 7, 1975, in Raleigh, North Carolina, with the following members present:

Board Members Anderson, Brinson, Callahan, Garrison, Greene, Harris, Montgomery and Vaughn.

Board Member Green was absent. He was represented by W. Stanford White, Member of the House of Representatives.

* * *

In accordance with Administrator Rose's presentation and recommendation, the Board unanimously approved the following resolution relative to proposed bridges over the Intercoastal Waterway, on a motion by Board Member Montgomery, which was seconded by Board Member Callahan:

"WHEREAS, the U.S. Army Corps of Engineers now owns, operates and maintains six (6) drawbridges over the portion of the Atlantic Intercoastal Waterway in North Carolina which are connecting links to the State Primary Highway System; and

"WHEREAS, the U.S. Army Corps of Engineers plans to request Congress appropriate sufficient Federal funds to replace all five existing drawbridges in North Carolina under the jurisdiction of the Wilmington District with high level fixed-span bridges; and

"WHEREAS, due to the unavailability of State Funds, the MAAN N.C. Board of Transportation is not in a position to participate in the cost of the replacement bridges proposed by the U.S. Army Corps of Engineers; and

"WHEREAS, the N.C. Board of Transportation adopted a resolution on 2 August 1974, agreeing to accept full ownership and responsibility upon completion by the U.S. Army Corps of Engineers of a new high level (65 foot minimum vertical clearance) fixed-span bridge on U.S. 264 at Wilkerson Creek in Hyde County; and

"WHEREAS, the Wilmington District Office of the U.S. Army
Corps of Engineers has requested, and the State Highway Administrator
has recommended, that the N.C. Board of Transportation accept ownership and maintenance responsibility upon the completion of high level
(65 foot minimum vertical clearance) fixed-span bridges at:
(a) Hobucken on N.C. 33 in Pamlico County; (b) Core Creek on N.C. 101
in Carteret County; (c) Fairfield on N.C. 94 in Hyde County; and (d)
Coinjock on U.S. 158 in Currituck County; and

"NOW, THEREFORE, BE AND IT IS HEREBY RESOLVED, that the N.C. Board of Transportation agrees to accept full ownership and responsibility of said new bridges and approaches upon completion by the U.S. Army Corps of Engineers of high level (65 foot minimum vertical clearance), fixed-span bridges at: (a) Hobucken on N.C. 33 in Pamlico County; (b) Core Creek on N.C. 101 in Carteret County; (c) Fairfield on N.C. 94 in Hyde County, and (d) Coinjock on U.S. 158 in Currituck County."

See next page for certification

STATE OF NORTH CAROLINA

WAKE COUNTY

I, Myrtle R. Wall, as secretary to the Board of Transportation, an agency of the State of North Carolina, do hereby certify this is a true and correct excerpt from the minutes of the February 7, 1975

Board of Transportation meeting.

Corps of Engineers had requested the Scare Wighway Administrator

IN WITNESS WHEREOF, I have hereunto set my hand this
7th day of February 1975.

Murie R. liace



